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Trans-European comparison of motivations and attitudes of occasional consumers of organic products

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ABSTRACT

Recent research has found clear differentiation between views of regular and occasional European consumers of organic products, with distinct regional differences. There was also evidence that some uncommitted consumers gradually consume more organic products and eventually become committed consumers. However, most research focuses on regular, loyal or heavily committed organic consumers, and scope for market growth based on occasional consumers has gone unexplored. We report on studies that, based on existing literature, explore the complex, interdependent and subjective nature of occasional consumers' appreciation of organic products. The first evidence source was an analysis of focus groups of occasional consumers conducted in five European countries, which compared quality and safety attributes and production and processing techniques between organic and conventional products. It can be concluded that many attitudes are very product-specific. The second was a large-scale survey involving 5500 respondents in 6 countries of organic purchasers, each answering questions relating to one of the four products featured in the focus groups. Past purchases of organic foods were recorded, enabling regular and occasional organic consumers to be identified. Structural equation models based on these data enabled description of a number of statistically significant differences in attitudes and beliefs about quality and safety in food products between regular and occasional consumers of organic foods.

1. Introduction

Consumers' expectations, attitudes and perceptions about organic foods have been studied extensively, but a predominant focus has been on regular consumers, and there have been some difficulties in comparing consumer surveys from different European countries because a range of different questionnaires or survey approaches have been used. These have mainly focused on the quality and safety characteristics known to be recognized by consumers of conventional foods (such as appearance, taste, packaging, microbiological safety and production, or trade system associated quality benefits such as 'free range', 'GM-free' and 'fair trade' [1,2]); also important for organic consumers are the issues of proximity of production, specific animal welfare standards, and nutritional benefits associated with different levels of processing of foods [3–5].

The QLIF[1] integrated project aims to improve quality, ensure safety and reduce cost along the European organic and 'low input' food supply chains through research, dissemination and training activities. Reaching occasional (or light, or 'new') consumers will be important for extension and development of the organic market, which is a legitimate concern for public action to offset market failures in respect of the environmental impacts of European agriculture [6]. This paper specifically focuses on the findings of occasional consumers' perceptions, expectations and attitudes towards quality and safety of organic and low-input foods to provide foundations for a strategy to develop and extend the market for such foods [7]. This has been drawn from a review of existing studies and some re-analysis of available data; identification of important quality and safety characteristics that were omitted from previous consumer surveys; and design and implementation of a consolidated European consumer questionnaire

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exploring relevant issues that used a common methodological framework.

The account that follows is divided into four sections. The first section describes the results of meta-analyses (previous studies, panel datasets and interview transcripts) that were undertaken to prepare for the substantive research activity. The second section analyses the results of focus group discussions held in five countries (France, Germany, Switzerland, Italy and the UK), which focused on occasional 'uninvolved' consumers of organic products. The third section reports on the design and verification of a conceptual model of consumer behaviour related to the characteristics of organic and low-input food that consumers regard as important indicators of food quality and safety. The final section triangulates these approaches (each of which focuses on particular elements of consumer behaviour), using outcomes from one approach to validate those of another; and provides recommendations for future development of the organic and low-input sectors.

2. Preparatory literature review and re-analysis of primary data

Up to the late 1990s, most consumer research in the organic sector relied almost exclusively on self-reporting of attitudes and buying behaviour drawn from quantitative surveys, and only limited qualitative empirical investigation of organic consumers. In addition, although numerous consumer studies had been undertaken across Europe, there was limited pan-European research in the field, and it was difficult to generalize findings from individual countries. From 2000 on, a number of projects have reviewed relevant literature (for example, [8–10]; and for QLIF [11]) and discerned a range of methodological styles and reference frames, from a direct focus on consumer attitudes and investigations of organic buying behaviour, to conceptual social science studies of the role of the organic sector in the context of social and cultural change.

While such studies had differences in approach, they were not at all mutually exclusive in terms of the issues that they highlighted. Strong 'merit good' features were associated with implicit quality dimensions: use of natural raw materials, welfare-orientated animal husbandry, and environmentally friendly land use and processing techniques, which contributed not only to individual well-being in terms of healthy eating, but also to broader social and environmental goals. This complexity revealed at least two different, but related aspects of quality:

1. Sensory and organoleptic attributes, experienced directly by consumers, including size, colour, form, taste, smell and 'feel', which, however, may be of relatively peripheral significance since there was no guarantee that food had been produced organically just because it smelled good or tasted differently. Consumers were unable to assess the organic quality of food simply from its physical characteristics, but needed reassurance from credible industry standards that aided the perception of 'extrinsic' quality and also safety of organic foods. Certification, if working properly, should incorporate perception of organic quality as a symbol of sustainable agriculture and healthy living, interwoven with process-related quality and the use of safe or natural raw materials. Indications existed that such attitudes were encouraged by lack of faith in the conventional food sector.
2. Intangible aspects of quality perception were critically important to consumers, yet difficult to evaluate. Benefits were associated with health, safety and environmental soundness, as 'pure' or natural food, as low-input products, and foods produced without using genetically modified technology. Ethical issues included conservation, fair trade, third-world impacts, animal welfare and local or regional production. 'Feel good' factors were also linked to the desire to attain exclusivity; conversely, purchasers might wish to avoid identification with certain types of consumers (for example, 'hippies'). Mostly, though, organic purchases exemplified preferences for cleaner, safer lifestyles, improved health and happiness and also responsible and thoughtful contributions to community and the natural environment.

It was possible to follow up on these themes by re-using two sources of primary data. The first source was a dataset containing information on household expenditures, supplemented by qualitative data provided by consumer panel members, for Denmark (having highest per capita European organic food consumption) and the UK (having the most rapidly growing market).[2] The second source was qualitative market research data (focus group and laddering interviews) undertaken by the OMIaRD[3] project, which contained much of interest on consumer motivations and attitudes concerning general food quality and safety, and also low input and origin-labelled products.

Within the panel data, consumers were grouped by level of purchase (heavy, medium, light users and non-users). Two factors of particular interest emerged from its analysis. First, while average organic budget shares in each group were stable (in Denmark) or growing (in the UK), a significant number of families moved from one group to another. For example, in Britain, 25% of heavy users in 2001 became medium users, 7% became light users and, most surprisingly, 20% became non-users. Correspondingly, around 20% who were non-users in 2001 had become light, medium or heavy users by 2003. Around one third of those who were heavy users in Denmark in 1997 were medium users in 2001, or even (although to a lesser extent) light users. Second, in Denmark, combining information on various private and public good motives for consuming organic goods with actual purchase behaviour (using simple regression and logit modelling, and a micro-econometric demand model), private good attributes alone had a significant effect on the organic budget share; the contribution from stated public good attribute values was not significant. Even though households more often assign the highest values to public good attributes, it was valued private good attributes that determined their purchases of organic foods.

The qualitative data showed strong differentiation between views of regular and occasional consumers of organic products. Quality, for regular consumers of organic products, involved both experiential and imbued characteristics, and relied on a belief that these would be delivered by organic farming systems. For occasional consumers, while they had the same concerns as regular consumers, they lacked knowledge and adequate trust in certification as a means of assurance of quality and safety. Product knowledge appeared low for regular as well as occasional consumers, particularly of how organic products are produced and processed and which characteristics are fundamental for the consumer with regard to quality and safety. Committed consumers would buy more products if these were available; lower growth in purchases by occasional consumers reflected a perception of poor value for money, a kind of half-life effect on purchases stemming from food scandals, and 'mainstreaming' of organic products in supermarkets. For most consumers, organic foods seemed to be stuck in the development phase of the product's life-cycle.

[2] See also [12].

[3] Organic Marketing Initiatives and Rural Development, European Commission Funded Project QLRT-1999-31124: the countries for which qualitative data were available were Austria, Switzerland, Germany, Denmark, Finland, France, Italy, and the UK. Original data analysed in Zanoli [13].

From the re-analysis that concentrated on quality and safety issues related to organic and low-input foods, consumers appeared to have complex, vague and sometimes contradictory requirements. For example, consumers associated organic food with a natural process and with food products that were either unprocessed or at least had a low level of processing, but modern lifestyles demanded convenience products. With regard to safety, consumers broadly agreed to its conception as a quality attribute rather than as a separate food attribute. They connected safety with anxieties about possibly harmful substances but expressed little concern about real health risks. For food safety, organic standards and certification fell short in terms of consumer reassurance, at least for the uncommitted. But for the committed, organic status was synonymous with quality, and attempts to improve it actually undermined, or 'conventionalized' the underlying production frameworks [14]. There was a general presumption in favour of locally produced food (one possible candidate for 'low-input' status), but technical and standards development has not been primarily orientated to short, local supply chains. There were also clearly divergent concerns between 'old' and 'new' organic consumers that cannot be addressed at the same time: what turns 'old' consumers on can be a turn-off for 'new' consumers, so there was a danger that any median strategy might alienate both groups. Also important was the fact that alternatives existed (such as origin labelled products, farmhouse products, or direct sales from farms) that might compete with organic foods for 'new' consumers. Also, one means of extending the organic market may involve development of processed and pre-packaged products that may be demanded by occasional organic consumers, but may be rejected by regular consumers who distrust the technologies involved. An in-depth exploration of *organic* quality standards was thus indicated.

One key issue that emerged from this analysis was the fact that although regular and occasional consumers appear, in their self-description, to be quite distinct, when shopping behaviour was observed over time the movement between these categories was much more fluid. These considerations were taken into account in the primary data collection and analysis, which is reported in the following two sections.

3. Trans-European focus group discussions involving occasional consumers

The key questions addressed by these focus group discussions revolved around quality and safety of both organic and low-input foods in a broader perspective. They concerned how consumers define and construct meanings around the concepts of quality and safety as they relate to organic and low-input foods, whether such concepts and meanings vary for different kinds of commodities, the mechanics of consumer perception and behaviour regarding organic and low-input foods, and the role that quality and safety characteristics play.

Four focus group discussions were held in each of the following five countries: France, Germany, Switzerland, Italy and the UK. Four model commodities were chosen for discussion (of which two were considered in each group discussion): bread, yoghurt, tomatoes, and eggs. These products were chosen according to a number of criteria: they allowed the exploration of different aspects of consumer choice; they included products perceived as being both high and low risk with regard to safety; they covered both animal and vegetable categories; and included at least one processed product. In addition to these criteria, they were consistent with products on which research had been conducted by European partners in other QLIF sub-projects within the pan-European study. Participants were selected for high food involvement, and recruitment quotas were set on the basis of age, gender, consumption of the selected products, and specific instances of their consumption in organic form (although committed consumers of the commodities in question were excluded). Mention of organic products was minimized in recruitment screening, and avoided in the early part of the discussions. All groups followed common facilitation guidelines, which involved discussion questions and prompts on four substantive themes: (1) the criteria used when buying the two food products under discussion, (2) whether disappointment had occurred at all with the purchased products, (3) the influence of production and processing techniques on quality, and (4) willingness to pay for the product. Discussions lasted for up to 2 h.

The results (reported in full in Francois and Sylvander [15]) extended understanding of the attitudes and behaviour of occasional consumers, drawing on discussions of the selected products. There was a clear difference in the way in which meanings relating to food quality and safety in general, in relation to organic and low-input products were constructed by occasional consumers in comparison to the more extensive research results available for regular, committed consumers. These differences emerged from a discussion that was, as noted above, mostly unprompted with regard to discussion on organic products. For regular consumers, prior research had shown that taste and health were the main motivations for buying organic products; organic was the reference for quality, and when buying food, although not always possible, was always desirable. In contrast, occasional consumers who took part in this study did not regard organic as such a benchmark; if conventional products did not meet their requirements, organic was one among a number of alternatives when looking for better products. Meanings of quality differed according to the products and place of purchase.

Tomatoes, bought in supermarkets, did not meet taste requirements. However, the consensus was also that organic tomatoes bought in supermarkets were also very disappointing, with poor taste, more expensive and sometimes even of inferior quality compared with conventional tomatoes.

Battery eggs did not meet welfare requirements. Some participants experienced taste differences between battery and organic or free-range eggs. Purchasing organic eggs from supermarkets met welfare requirements.

For *yoghurt* and *bread*, participants desired taste diversity in purchases; for desert, organic yoghurts were sometimes preferred, and among wide diversity of breads for sale, organic was sometimes an alternative for finding a good variety. Taste was important for bread, but health concerns were less evident; without prompting, no participant mentioned pesticide residues as a consideration in non-organic wholemeal bread.

Also for yoghurt and bread, chosen as representatives of processed products, organic was spontaneously linked to 'naturalness' in processing. Leavened or natural yeast was important for the latter, absence of food additives, especially gelling agents, for the former. Animal welfare was not as prominent with regard to yoghurt as it was to eggs.

For some, organic was an alternative to industrialized agriculture, which was seen as resulting in poor quality food; water contamination by pesticides and nitrates was also mentioned in France. In terms of safety, organic tomatoes and flour for making bread was viewed as (almost) agrochemical residue-free, and as a guarantee of absence of GMOs (thought to cause allergies); organic yoghurt was linked to absence of food additives; egg purchasers did not closely link welfare to safety issues. Not all participants automatically rejected any 'dangerous' production techniques, even GM foods; consequently, willingness to pay for non-use of any technology was limited.

So for fresh or lightly processed products, organic was seen as a guarantee of the naturalness and purity of the food (without pesticides, hormones, or antibiotics). Organic was associated with

freshness and a minimal level of processing, and thus linked to short distribution channels, on-farm production, and self-production; indeed, some evidence existed of confusion in the participants' minds between organic and any product purchased through short distribution channels. With sporadic general distrust of long food production, processing and distribution chains, 'knowing the producer' was an important factor in the trust-building process. Some participants even produced or processed food themselves, as a means of assuring its quality and safety.

Furthermore, for some participants, organic was considered an assurance of food safety for processed foods, when farming or processing techniques were suspected. For example, high spatial concentration of hens in egg production could be associated with poor quality or even created an aversion to battery eggs. Consequently, for some, free range or barn eggs were considered an acceptable and cheaper alternative to organic eggs. Also there was some evidence that the BSE crisis had led to mistrust, not only in the conventional beef commodity chain, but also in the whole industrialized food chain.

Despite this mistrust, participants' knowledge of agriculture, food technology and processing was mostly weak; furthermore, they did not immediately associate agricultural production techniques with the final processed products. Some participants were keen to become better informed, but others felt overwhelmed by the quantity of information they needed to gather to make their food choices. Both attitudes might lead to reinforcement of organic choices in consumption. The latter desired to have a label 'not to have to think when I buy my food' that provides insurance in food safety and quality, without personal investment. The former, by learning about contrasts between conventional and organic agriculture, came to strongly reject some conventional techniques, such as battery poultry production, use of antibiotics in animal feeding, and heavy agrochemical use in crop production.

Therefore, knowledge of conventional industrial techniques might be a strong incentive for some consumers to buy and eat organic food, if they can be persuaded to trust it to deliver good quality and can be assured that the organic label provides such a guarantee [16]. Long commodity chains, industrial agriculture and processing, and retailing through supermarkets were linked, in some consumers' minds, to profit-seeking as the major goal. But not all low-input foods were associated with such inconsiderate industrial methods, which explained participants' interest in the technical and economic conditions that prevail in supply chains.

4. Design and verification of a conceptual model of consumer behaviour

The results reported here followed from the analysis of focus group discussions. Firstly, a conceptual model of consumer behaviour was designed that could be tested through the distribution of a questionnaire. Then the questionnaire, which covered the same commodities chosen for the focus group discussions, was distributed in France, Germany, Greece, Italy, Switzerland and the UK. It provided data to test the model, and to identify characteristics of organic and low-input food which consumers regard as important indicators of food quality and safety. Analysis was undertaken to confirm the indicators of quality that people use when they are buying food, and to identify those that could be actionable with respect to supply chain agents; to measure the relative importance of quality cues on consumer satisfaction, perceived value and behavioural intentions through a structural equation modelling (SEM) approach; and to identify consumer segments and inter-country variations.

The questionnaire was organized into four thematic sections. The first section concerned consumer behaviour with respect to the specific food product that was usually eaten in the household. It contained a nominal multiple response measure of the outlet where the product was obtained, and measures for the constructs of satisfaction, likelihood of re-purchase, perceived value, sacrifice, importance of quality cues, and perceived risk. The second section concerned food in general. It consisted of a single construct with 11 measures of the importance of food attributes that were related to the wider implications of food choice that may be defined as issues concerning the consumer as a citizen. The third section dealt with organic food. It consisted of measures relating to the frequency of organic food purchase for eight product categories, future purchase intentions for the same product categories, and a comparative measure of organic and non-organic foods with respect to a selection of attributes that were also the subject of the measures of quality and safety employed in the section on the specific food product. The fourth and final section concerned socio-demographic characteristics of respondents. It contained nominal measures of the presence of children in specific age categories in the household, education level, area of residence, and annual household income.

A quota sample of 1000 completed questionnaires was distributed in Germany, France, Italy and the UK according to ACNielsen marketing regions. The respondents were recruited according to the criteria that they were adult shoppers who regularly purchased one of the specified products. A quota of 250 questionnaires was specified for each product type and additional country specific quotas were specified for age, region, and gender. In Switzerland a target of 700 questionnaires was specified, reflecting the smaller population and the high cost of distribution. The quota was split across four regions. No specific regional quota was applied in the case of the Greek data although the questionnaire was distributed in both the north and the south of the country. The sample in all countries was selected to approximate the gender split for buying responsibility (approximately 70:30, female: male).

The process undertaken produced a unique data set providing comparative data across the six countries of attitudes towards food quality and safety among European consumers. It is of particular significance as it includes the views of both regular and occasional, or 'light', consumers of organic foods. The pooled data consist of 5720 valid responses, 1001 in France, 1001 in Germany, 1000 in Greece, 1001 in Italy, 705 in Switzerland, and 1012 in the UK. The composition of the sample in terms of frequency of purchase of organic foods was 69% rare purchasers and 31% regular purchasers: 79/21% in France, 41/59% in Germany, 64/36% in Greece, 74/26% in Italy, 63/37% in Switzerland, and 63/37% in the UK.

The first stage of the data analysis involved obtaining frequency distributions and descriptive statistics for each of the variables investigated and comparing these across countries and products. The second stage involved an investigation of the relationships between and among variables. Cross tabulations were used to examine associations between propensity to purchase organic products and socio-demographic characteristics. Analysis of variance tests were used to test hypotheses relating to differences in average scores across socio-demographic groups of respondents and examine the differences between higher and lower propensity organic consumers. The third stage concerned the use of a structural equation model (SEM) to estimate the determinants of consumers' behavioural intentions in terms of constructs of sacrifice, perceived quality, perceived value and satisfaction. Models were estimated for each of the four products and each of the six countries and for countries in aggregate, resulting in 30 models in total. A general model was specified using a nested model framework that permitted the testing of alternative models about the nature of the inter-relationships between specified constructs by imposing constraints on the path coefficients. Hypotheses to test four alternative models were developed. The alternative models

were defined respectively as: the Indirect Model; the Satisfaction Model; the Research Model; and the Value Model.

The results raise a number of issues that are of direct relevance to low-input food producers, processors and marketers and from a wider perspective, to food policy issues. There was strong evidence across the products and countries that low-input characteristics were important to consumers as quality indicators. For example, together with freshness and taste, free from chemical residues and free from artificial ingredients were regarded as of high importance in indicating quality across all countries and products. Similarly, 'naturalness' and 'free from GM ingredients' occurred in the top ranked indicators for bread, tomatoes and yoghurt across Europe. At the other end of the range of quality indicators, brand name and price – both important historically in the marketing mix – were not regarded as particularly important indicators of quality for bread, tomatoes and eggs and brand name and packaging were regarded as the least important for yoghurt. The distribution of the ranks of quality indicators across countries for all products and for each product separately revealed that there was a clustering – an agreement of ranking – at the top and bottom ends, but it was around the mid-ranked quality indicators that national differences were evident. For example, 'made with natural yeast' was regarded as a relatively important indicator of quality in bread in Italy and France but was much less important in the other countries.

As the models of food consumer behaviour incorporated a series of quality indicators into an overall measure of consumer perception of quality, the components of quality that display greatest variation between consumers in their contribution to overall perception can be identified. By implication, if these quality components can be 'improved' in the minds of consumers, this would have the greatest impact on the overall perception of quality, and by implication, increase sales of the organic or low-input products. One such example was the case of natural yeast discussed above. A second example was the case of eggs in Germany, which showed high levels of variation in the perception of the 'quality of poultry feed', 'not massed produced' and 'outdoor production'. All offer opportunities for a marketing message to strengthen consumers' perceptions of these attributes as indicators of egg quality. In cases such as this there are opportunities to develop country and product-specific marketing plans.

The data on the perceived risk arising from different processes in the production and processing of the four products reinforced the point that low-input processes were associated with lower levels of perceived risk, that is, low-input products were regarded as being safer. Furthermore, comparing organic and non-organic consumers, there were differences in the level of concern that they expressed. For example, consumers of organic products showed significantly greater concern than non-organic consumers over the presence of GM ingredients in yoghurt in five of the six countries surveyed.

Comparison of organic and non-organic consumers reveals further implications for the marketing of low-input products. For each country, and for each of the four products, product characteristics consumers regard as most important as indicators of the quality of that food product can be identified. These can then be compared with those product characteristics for which consumers regarded organic products as superior to non-organic, and then select these for consumers who currently did not normally buy organic products. For example, in the UK, although non-organic consumers viewed organic products as being superior to conventionally produced products with respect to many aspects of product quality, they regarded organic products as being 'about the same', or 'worse', with respect to providing a fair price to producers, appearance, shelf life and keeping quality, value for money, range of types available, and price. This clearly indicates those aspects of product quality that provide most scope for increasing sales to previously non-organic consumers. Furthermore, although organic consumers, as one might expect, had a higher opinion of organic products relative to non-organic consumers on all aspects of product quality, their approval exceeded those of non-organic consumers by the greatest amount in the case of just three of these characteristics: value for money, fair price to producers, and price. This suggests that it may be these price-related features of organic products where perceptions can be changed.

The estimated SEM models indicate that the approach was successful across the 30 applications. There is variation in the specific model that is appropriate for each country through the modification of the general model specification to accommodate non-acceptable signs or non-significant relationships. The most common model is that behavioural intentions are determined directly by satisfaction, that satisfaction is determined directly by perceived value, and that perceived value is determined directly by perceived quality. In addition to these direct effects, there are a series of indirect effects that involve the mediating effects of perceived value and satisfaction. The most common effects involve the link between perceived quality and satisfaction through the mediation of perceived value, and the link between perceived value and behavioural intentions through the mediation of satisfaction.

The results indicate that consumers believed they were buying 'organic versions' of food products to a much greater extent than was suggested by known sales of certified organic products. This implies that consumers did not fully understand organic certification, and perhaps perceived products with low-input characteristics as organic products. This may indicate a latent demand for organic products with a very favourable potential for market growth that requires improved marketing communication. For example, when the past propensity to purchase 'organic' versions of a range of products is compared with the stated likelihood of 'organic' purchase in the future, the country with the largest increase in potential customers was Italy, which showed a 33.8% increase between past purchase and likelihood of future purchase of 'organic' across a basket of eight food products.

Not all of the implications that were brought to the fore by the study are of concern just to marketers. For example, energy efficiency in production and supply, although considered of moderate importance, was ranked fairly low by consumers. However, from a public good perspective these results are important indicators for governments and food policy makers and offer opportunities for the development of improved communication with respect to environmental aspects of food consumption.

There was also, however, confirmatory evidence from the results that consumers do not necessarily trust the certification process and demonstrated higher preference for a product being 'natural' than being certified organic. In part this may have been a lack of understanding the certification requirements and the meaning of 'organic'. However, it might also point to the value of focusing marketing strategy upon specific characteristics of food products rather than a basket of characteristics under a single label.

5. Conclusions

Both empirical studies reported above confirm the implication of prior research that occasional consumers have different expectations and attitudes of organic food compared with regular consumers. This holds true for all of the countries investigated, with only differences of secondary importance existing for different products. What emerges as a principal insight is that while common concerns are shared by regular and occasional consumers (relating to health, taste and other organoleptic attributes, environmental impacts, fairness for the agricultural community and suspicion of industrialized agricultural systems), occasional con-

sumers are less likely to connect these concerns solely to organic products. They are much more likely to trade off different characteristics and substitute other kinds of low-input products, and the quantitative extent of these can be accurately estimated from the SEM results. Both the focus group and SEM results confirm the lack of knowledge about organic production methods and certification systems, among both regular and occasional consumers, mirroring those found elsewhere [17–19]. These results suggest, however, that by providing a clearer definition for organic products, and improving consumer understanding of the purpose and effectiveness of the organic certification system, the tendency to trade off organic for other low-input characteristics could be lessened, and market volumes increased. Passing the benefits of scale economies that are achieved from growth in organic markets on to consumers in the form of lower prices would also make a significant contribution, as price sensitivity is a major issue for occasional consumers.

Although relatively understated, environmental concerns (particularly relating to the impact of the transportation of food in processing and distribution) could be connected to a re-localized food system in which organic production plays a major part. Food policymakers have made sustainable local systems an objective of policy [20]. Notwithstanding the complexities of defining local food (in terms of content from upstream suppliers and downstream intermediaries, and speciality dimensions of 'traditional' foods based on geographic origin), some interests have sought to introduce more rigorous criteria for organic credentials. Within the Soil Association (the largest UK organic certifier) a debate over the integrity of organic branding has led to a consultation on options to improve standards, ranging from labelling produce and carbon offsetting to an outright ban on airfreight. The report on the consultation (Soil Association [21]) recommended not introducing any immediate restrictions, but monitoring the level of air-freighted products bearing its logo, and working to reconcile development objectives with broader concerns about the general sustainability of food. Although this decision not to implant further information into an organic label seems sensible, to avoid further confusion for already poorly informed consumers, it illustrates a central problem in aligning the desires of consumers, which are transparent, with the necessary but complex information they need for different products to attain those desires in relation to their food choices. Not only is better technical information required [22], the challenge is to create socio-economic content for the organic label that will act as a guarantee for the whole range of consumer concerns.

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